



National Aeronautics and
Space Administration

Langley Research Center
Hampton, VA 23681-2199

Educational Product

Educators

Grades 6-8

EP-2004-04-08-LARC



NASA CONNECT

NASA CONNECT™ is a FREE, annual series of integrated math, science, and technology programs emphasizing research-, inquiry- and standards-based instruction for students in grades 6-8. Each program in this Emmy®-award-winning series has three components: (1) a 30-minute television broadcast; (2) an educator guide, including a hands-on activity; and (3) an online activity that reinforces concepts presented in the broadcast.

FREE CLASSROOM MENTORS

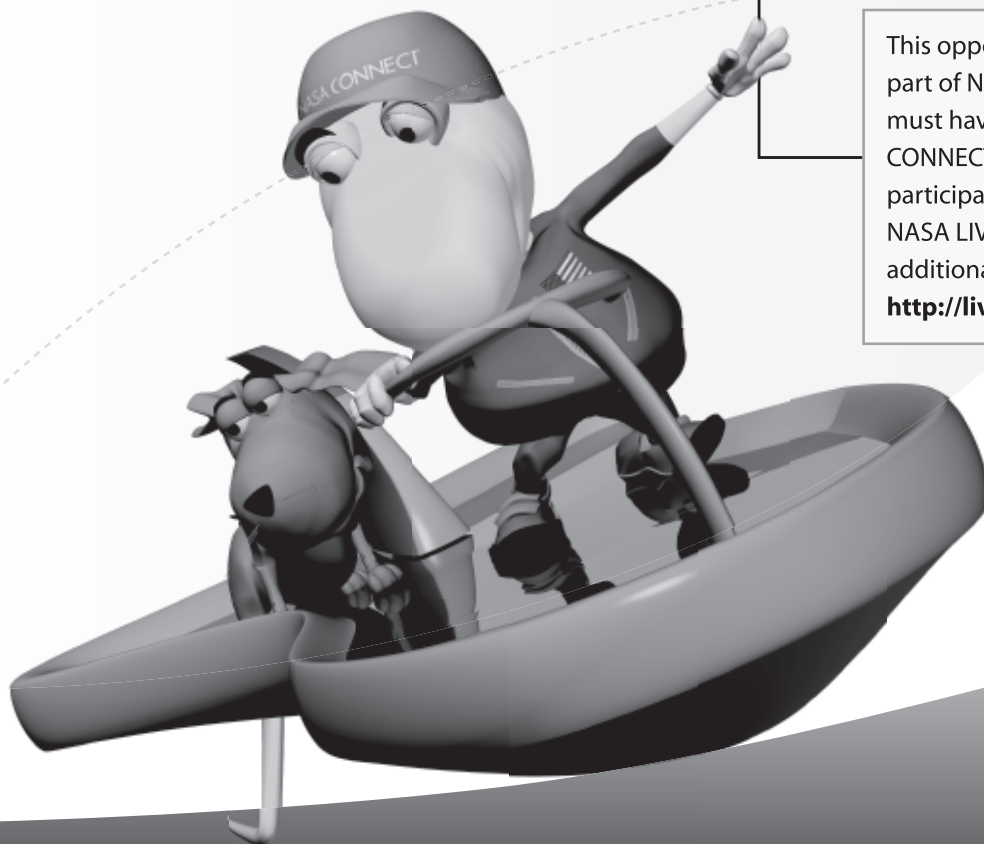
The AIAA provides classroom mentors to assist with the hands-on activities. For more information, visit the NASA CONNECT website or email nasaconnect@aiaa.org.



Use the Power of Technology to Make the NASA Connection

Your students can participate in a FREE videoconference that connects them to the NASA experts featured in each new program, the latest research, exciting demonstrations, and more. See reverse side for a list of scheduled events.

This opportunity is offered as a part of NASA LIVE™. Students must have viewed the NASA CONNECT™ broadcast prior to participating. To register for a NASA LIVE™ event and additional information, visit <http://live.larc.nasa.gov>!



2004-2005 SEASON

<http://connect.larc.nasa.gov>

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Check the back for a list of programs in the 2004-2005 NASA CONNECT™ series and for more information about obtaining the programs.



NASA CONNECT

D) CC 2004-2005 SEASON

Inspiring the next generation of explorers as only NASA can.

Register online at <http://connect.larc.nasa.gov> to receive a FREE PDF of the educator guides and program updates via email.

How can I get the television broadcast?

- NASA CONNECT™ programs air on PBS, NASA TV, Channel One, and on many Cable Access Channels.
- The programs are up-linked via KU- and C-band satellite.
- Programs can be viewed online at <http://www.knowitall.org> or <http://ali.apple.com>
- Video copies of the broadcast can be purchased from NASA CORE <http://core.nasa.gov>, or call toll free, 1-866-776-CORE.

Visit the NASA CONNECT™ web site for more details <http://connect.larc.nasa.gov>

Program 1: PSA, The Astronaut's Helper (R)

(Produced for NASA CONNECT™ by NASA Ames TV)
Starts airing: Thursday, September 23, 2004,
11:00 – 11:30 a.m. EDT

NASA engineers use geometry and algebra to develop and test the Personal Satellite Assistant (PSA), an autonomous robot to support future space missions.

Mathematics Concepts: Algebra and Geometry
Science Concepts: Physical Science
NASA Research: Personal Satellite Assistant (PSA)

Program 2: Good Stress: Building Better Muscles and Bones

Starts airing: Thursday, October 21, 2004,
11:00 – 11:30 a.m. EDT

NASA LIVE™ Event: Friday, November 19, 2004
NASA researchers and scientists collect and analyze physiological data to understand how muscle and bones are constantly changing, especially in a microgravity environment. They will also emphasize that the human body, including muscles and bones, requires physical stress to be healthy and grow.

Mathematics Concepts: Data Analysis
Science Concepts: Life Science and Health
NASA Research: Bioastronautics

Program 3: The Venus Transit (R)

Starts airing: Thursday, November 18, 2004,
11:00 – 11:30 a.m. EST

NASA LIVE™ Event: December 17, 2004
NASA researchers and scientists use measurement, ratios, and graphing to set the scale of the solar system, study the planet Venus, and investigate the solar-planetary connection.

Mathematics Concepts: Measurement, Ratios, and Graphing
Science Concepts: Physical Science
NASA Research: Transit of Venus

Program 4: Rocket to The Stars

Starts airing: Thursday, December 16, 2004,
11:00 – 11:30 a.m. EST

NASA LIVE™ Event: Friday, January 21, 2005
NASA engineers and scientists use algebra to study the transfer of energy on Earth and in space. They will introduce exciting propulsion concepts that astronauts may use one day to explore the solar system and beyond.

Mathematics Concepts: Algebra
Science Concepts: Physical Science
NASA Research: VASIMIR Plasma Rocket

Program 5: Virtual Earth (R)

Starts airing: Thursday, January 20, 2005,
11:00 – 11:30 a.m. EST

NASA LIVE™ Event: Friday, February 18, 2005
NASA researchers and scientists use graphical analysis to develop a scientific understanding of the Earth system and its response to natural and human-induced changes to enable improved prediction of climate, weather, and natural hazards for present and future generations.

Mathematics Concepts: Representation

Science Concepts: Earth Science

NASA Research: Earth System Science

Program 6: The "A" Train Express (R)

Starts airing: Thursday, February 17, 2005,
11:00 – 11:30 a.m. EST

NASA LIVE™ Event: Friday, March 18, 2005
Take a ride on the "A" Train Express. NASA researchers and scientists use satellites and problem solving to improve weather prediction and our understanding of aerosols and clouds.

Mathematics Concepts: Problem Solving
Science Concepts: Weather and Meteorology
NASA Research: CALIPSO Satellite, CloudSat Satellite

Program 7: Ancient Observatories: Timeless Knowledge

Starts airing: Thursday, March 17, 2005,
11:00 – 11:30 a.m. EST

NASA LIVE™ Event: Friday, April 22, 2005
With the use of technology (ancient, modern, and future), NASA scientists and astronomers will investigate how ancient civilizations worked to unlock the secrets of the Sun. Through the power of geometry, learn how light was used to provide a means of investigating the universe.

Mathematics Concepts: Geometry
Science Concepts: Space Science, History, and Nature of Science
NASA Research: Sun-Earth Connection

Program 8: Better Health From Space to Earth (R)

Starts airing: Thursday, April 21, 2005,
11:00–11:30 EDT

NASA LIVE™ Event: Friday, May 20, 2005
NASA researchers and scientists use measurement and estimation skills to help characterize health, environmental, and other operational human biomedical risks associated with living in space and to identify strategies, tools, or technologies to prevent or reduce those risks.

Mathematics Concepts: Measurement and Estimation
Science Concepts: Life Science and Health
NASA Research: Bioastronautics

Program 9: Hidden Treasures: Landscape Archeology

Starts airing: Thursday, May 19, 2005,
11:00 – 11:30 EDT

NASA LIVE™ Event: Friday, June 3, 2005
Discover the hidden treasures of the past. NASA archeologists and scientists use remote sensing and problem solving to determine how ancient civilizations adapted to their environment and what factors may have led to their disappearance.

Mathematics Concepts: Problem Solving, Representation
Science Concepts: Earth Science, Science in Personal and Social Perspectives
NASA Research: Landscape Archeology, Remote Sensing

See web site for NCTM, NRC, ITEA, and ISTE standards covered in each program.

(R) indicates a repeat program from the 2003-2004 NASA CONNECT™ season.